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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-------------------------|---------------------|------------------|
| 10/523,286  | 02/03/2005  | Christopher J. Dinsmore | 21007YP             | 3804             |
| 210   | 7590        | 06/21/2006              | EXAMINER            |                  |
| MERCK AND CO., INC<br>P O BOX 2000<br>RAHWAY, NJ 07065-0907 |             |                         | CHU, YONG LIANG     |                  |
|   |             |                         | ART UNIT            | PAPER NUMBER     |
|   |             |                         | 1626                |                  |
| DATE MAILED: 06/21/2006                                     |             |                         |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/523,286 | <b>Applicant(s)</b><br>DINSMORE ET AL. |  |
|                              | <b>Examiner</b><br>Yong Chu          | <b>Art Unit</b><br>1626                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 7-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/23/05, 10/19/05</u>  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

Claims 20-23 are cancelled by amendment filed on 19 May 2006. Therefore, claims 1-19 are currently pending in the instant application.

### *Information Disclosure Statement*

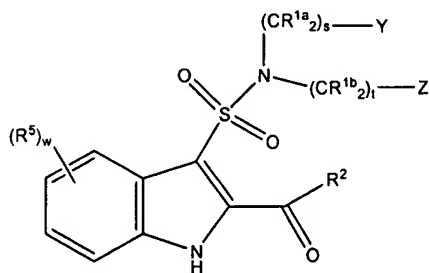
Applicant's Information Disclosure Statements, filed on 23 December 2005, and 19 October 2005, have been considered. Please refer to Applicant's copies of the PTO-1449 submitted herewith. The name of First Named Inventor in both IDS is not correct as marked. Correction is required.

### *Priority*

This application is a 371 of PCT/US03/24393, filed on 5 August 2003. Applicants claim the benefit of U.S. provisional patent application 60/402,482 filed on 9 August 2002 under 35 U.S.C. §119(e).

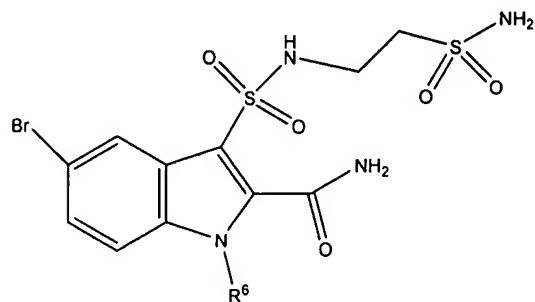
### *Response to Restriction*

The response to the restriction request with election of Group I, a compound of



Formula (I)

(e.g. claims 1-6 with elected species)



) with traverse by Applicants' representative,

Attorney David A. Muthard dated on 17 May 2006, has been considered. Applicant's arguments have been fully considered but they are not persuasive. Please refer to the office action on May 5, 2006.

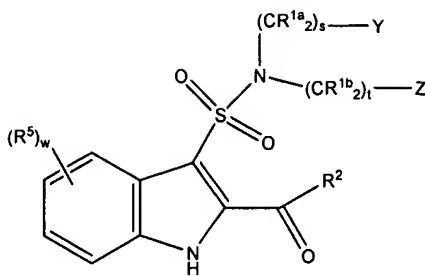
However, as previously stated in the restriction requirement, in accordance with M.P.E.P. 821.04 and *In re Ochiai*, 71 F.3d 1565, 37 USPQ 1127 (Fed. Cir. 1995), rejoinder of product claims and method of use claims commensurate in scope with the allowed product claims will occur following a finding that the product claims are allowable. Until such time, a restriction between product claims and process is deemed proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Status of the Claims***

The scope of the invention of the elected subject matter is as follows:

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Compounds of formula (I), , depicted in claim 1,

wherein:

$R^2$  is  $-N(R^3)_2$ , or  $-OR^3$ , wherein  $R^3$  is H, or  $C_1$ - $C_{10}$  alkyl;

and the remaining substituents are defined as in claim 1.

As a result of the election and the corresponding scope of the invention identified supra, claims 7-19, and the remaining subject matters of claims 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142 (b) as being drawn to non-elected inventions. The subject matter which are withdrawn from consideration as being non-elected subject differ materially in structure and composition and have been restricted properly a reference which anticipated but the elected subject matter would not even render obvious the withdrawn subject matter and the fields of search are not co-extensive.

Therefore, claims 1-6 are ready for examination.

### ***Claim Objections***

Claim 1 is objected because a minor error of missing "H" in formula (I) page 2 of the Amendment.

Claim 1 is objected because a minor error of underline of the compound on 13, page 10 of the Amendment.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

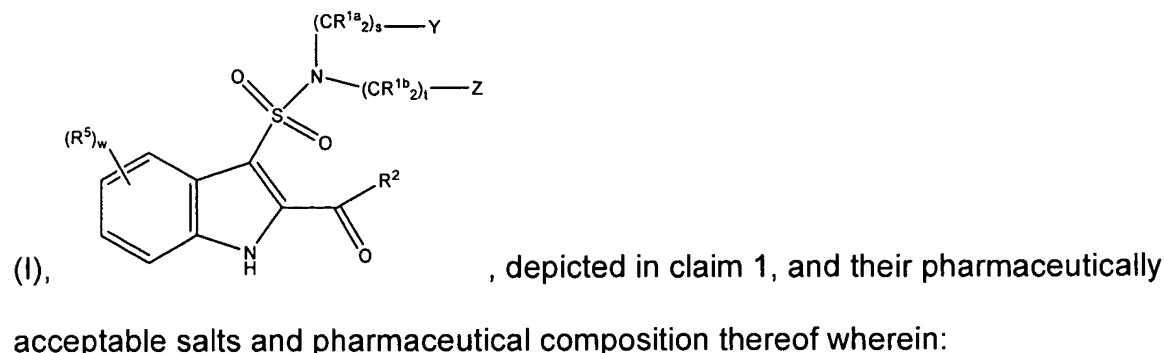
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 are rejected under 35 U.S.C. 103 (a) as unpatentable over Williams *et al.*, U.S. Patent 5,527,819.

Applicants' instant elected invention in claims 1-6 teach compounds of formula



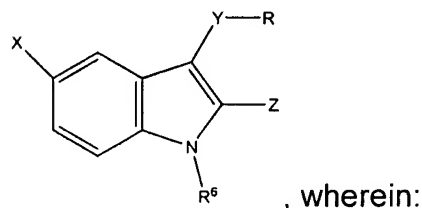
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$R^2$  is  $-N(R^3)_2$ , or  $-OR^3$ , wherein  $R^3$  is H, or  $C_1$ - $C_{10}$  alkyl;

and the remaining substituents are defined as in claim 1.

Determination of the scope and content of the prior art (MPEP §2141.01)

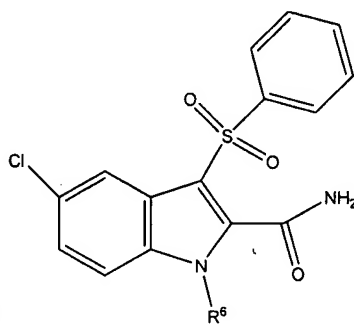
Williams *et al.* teach a class of compounds with a general formula



X is  $-H$ , halogen, ..., or  $-NHCO-C_{1-3}alkyl$ ;

Y is  $-S(O)_2-$ ;

R is  $-NR^2R^3$ , wherein  $R^2$  is H,...; and  $R^3$  is alkyl, aryl, cycloalkyl,...;



and a specific compound 18, , depicted on line 2,

column 11 of *U.S. Patent 5,527,819*. Williams *et al.* also teach a group of similar compounds 1-39, depicted on column 8-15 of the Specification.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Williams *et al.* teach a specific compound with phenyl group attaching to indo-sulfonyl. Williams *et al.* do not teach a specific compound with amino attaching to the said indo-sulfonyl group. However, Williams *et al.* claim a class of compounds of

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formula (I) in claim 1 of *U.S. Patent 5,527,819*, specifically point out that  $R$  is  $-NR^2R^3$ , provided that  $Y$  is  $-SO_2-$ , wherein  $R^2$  is H, or  $C_{1-3}$  alkyl, and  $R^3$  is definitions 1)-3) covering all the claimed compounds in the instant application.

*Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)*

One skilled in the art would have found that the instant application is prima facie obvious over the prior art by combining the compounds (1-39) in the specification with the claim 1 of the prior art, because the prior art teach closely both related compounds and motivation in claim 1.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

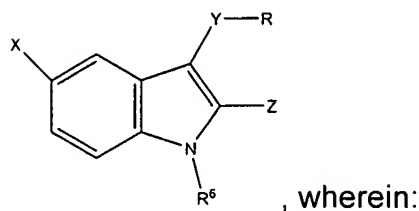
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, and 9 of *Williams et al.*, *U.S. Patent 5,527,819*.

*Determination of the scope and content of the prior art (MPEP §2141.01)*



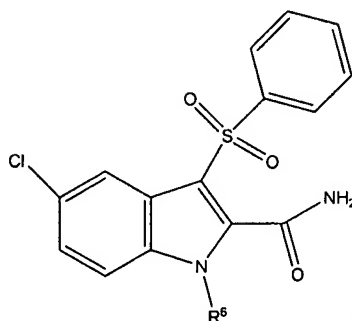
Williams *et al.* teach a class of compounds with a general formula



X is -H, halogen, .., or -NHCO-C<sub>1-3</sub>alkyl;

Y is -S(O)<sub>2</sub>-;

R is -NR<sup>2</sup>R<sup>3</sup>, wherein R<sup>2</sup> is H,..; and R<sup>3</sup> is alkyl, aryl, cycloalkyl,..;



and a specific compound,

of compound 18, depicted on

line 2, column 11 of *U.S. Patent 5,527,819*. Williams et al. also teach a group of similar compounds 1-39, depicted on column 8-15 of the Specification.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Williams et al. teach a specific compound with phenyl group attaching to indo-sulfonyl. Williams et al. do not teach a specific compound with amino attaching to the said indo-sulfonyl group. However, Williams et al. claim a compound in claim 1 of *U.S. Patent 5,527,819*, esecifically point out that R is -NR<sup>2</sup>R<sup>3</sup>, provided that Y is -SO<sub>2</sub>-, wherein R<sup>2</sup> is H, or C<sub>1-3</sub> alkyl, and R<sup>3</sup> is definitions 1)-3) covering all the claimed compounds in the instant application.

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*Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)*

One skilled in the art would have found that the instant application is prima facie obvious over the prior art by combining the compounds (1-39) in the specification with the claim 1 of the prior art, because the prior art teach closely both related compounds and motivation in claim 1.

***Conclusion***

No claims are allowed.


***Telephone Inquiry***

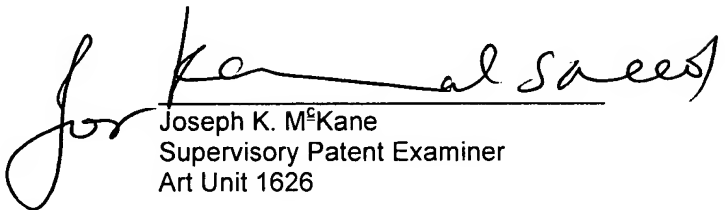
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Chu whose telephone number is 571-272-5759. The examiner can normally be reached between 7:00 am - 3:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
\_\_\_\_\_  
Yong Chu, Ph.D.  
Patent Examiner  
Art Unit 1626

  
\_\_\_\_\_  
Joseph K. McKane  
Supervisory Patent Examiner  
Art Unit 1626